**⚠ WARNING** **Electrical Shock Hazard**

Death or serious injury can result from failure to follow these instructions.
- Service by a qualified service technician only.
- Disconnect power before servicing this product.
- Reconnect all grounding devices after service.
- Replace all parts and panels before operating.

**⚠ AVERTISSEMENT** **Risque de choc électrique**

Vous pouvez être tué ou gravement blessé si vous ne suivez pas ces instructions.
- Réparations seulement par un technicien qualifié.
- Débranchez l'alimentation électrique avant la réparation.
- Rebranchez tous les dispositifs de mise à la terre après la réparation.
- Remettez toutes les pièces et panneaux en place avant d'utiliser l'appareil.

**⚠ ADVERTENCIA** **Riesgo de Descarga Eléctrica**

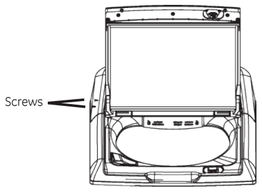
Usted puede morir o sufrir lesiones graves si no siguen estas instrucciones.
- El servicio técnico sólo debe ser realizado por un técnico calificado.
- Desconecte el suministro de corriente antes de realizar el servicio técnico.
- Luego del servicio técnico, vuelva a conectar todos los dispositivos de conexión a tierra.
- Reemplace todas las piezas y paneles antes de utilizar.

**WATER LEVEL SWITCH**

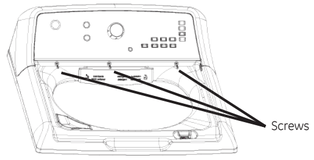
BEFORE DISCONNECTING HOSE FROM WATER LEVEL SWITCH, BE SURE WATER LEVEL IN MACHINE IS BELOW BOTTOM OF WASH BASKET. AFTER RECONNECTING HOSE, PUT MACHINE IN SPIN FOR AT LEAST ONE MINUTE BEFORE CHECKING OPERATION OF SWITCH.

## ① To Remove Control Panel:

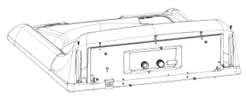
1. Open the lid and remove the two screws from one side of the lid, hold the hinge and slide the lid to pull it out from the washer.



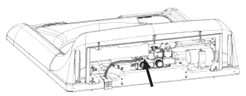

2. Remove the 3 screws from the front of the control panel, be careful do not fall the screws in the basket.




3. Remove the 7 screws from the back side of the cover and remove the back panel. Then remove the two screws from the top rear corners of the control panel.



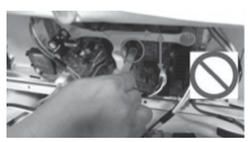
4. Do not push back the control panel and do not roll it toward the rear to avoid damage, carefully find the pressure sensor tube.



5. With one hand hold the control panel and with the other hand disconnect the pressure sensor tube from the control board turn it to the left and pull it outside.

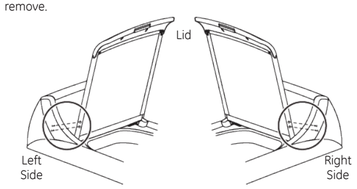
6. With one hand holding the backsplash, with the other holding the hose pressure switch with your thumb and forefinger and turn it to the left and out.

WARNING.- Pressure switch hose must not be manipulated either vertically or horizontally as there is a risk of damage to the switch, it must move ONLY as indicated in step 6.



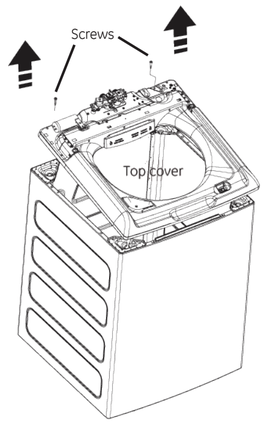
## ② To Remove Lid:

- Open the lid, remove the four screws (two each side) and lift the lid up to remove.



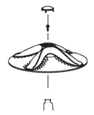

## ③ To Remove Top Cover:

1. Complete previous component removals ❶ and ❷.
2. Remove two 1/4" hex head screws at the rear of the top cover.
3. Slide the harness grommet out toward the rear of the washer.
4. Disengage the power cord from the top cover by lifting up on the front part of the cord and then slide forward to remove.
5. Raise the rear of the top cover up and pull forward slightly to disengage the top cover.

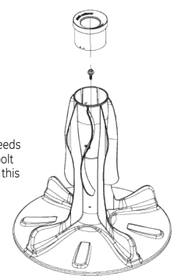



## ④ To Remove Impeller or Agitator (Depending on Model):

1. With a small screwdriver, pry the cap off of the impeller or remove the cap or cup from the agitator.
2. Remove the 7/16th hex bolt that secures the impeller/agitator to the shaft.
3. Pull the impeller/agitator off the shaft.

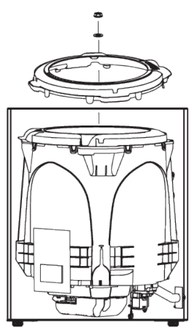


On agitator models, the cap funnel first needs to be removed to Access the 7/16th hex bolt then use an extension adapter to remove this hex bolt.



## ⑤ To Remove Tub and Basket Assembly:

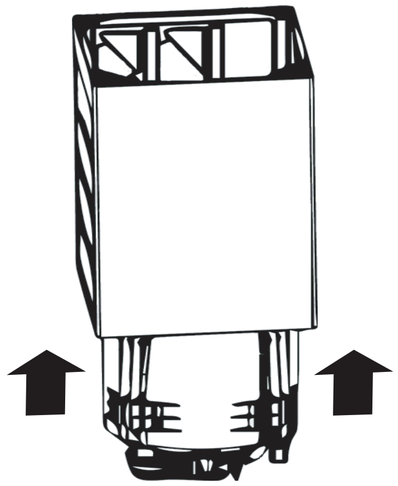
1. Complete previous component removals ❶, ❷, ❸ and ❹.
2. Remove the 1-5/16th hub nut and flat washer that secures the basket to the shaft.
3. Remove tub cover by unsnapping the 8 clips around its perimeter.



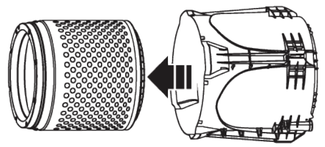
4. Disconnect the internal drain hose assembly from the cabinet.
5. Disconnect the rod and spring assemblies from the tub by leaning the washer over enough to slide prop blocks under the belt protector. Bring the washer to the upright position. This will cause the tub assembly to raise up high enough to disengage the rod and spring assemblies from the tub.

## ⑤ To Remove Tub and Basket Assembly (Continued):

6. Raise the cabinet up and over the tub assembly.

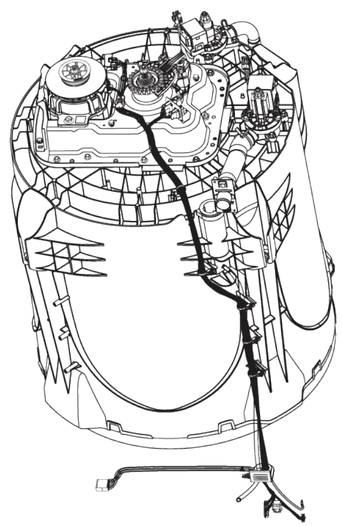


7. Lay the tub assembly on its side and slide the basket out of the tub.



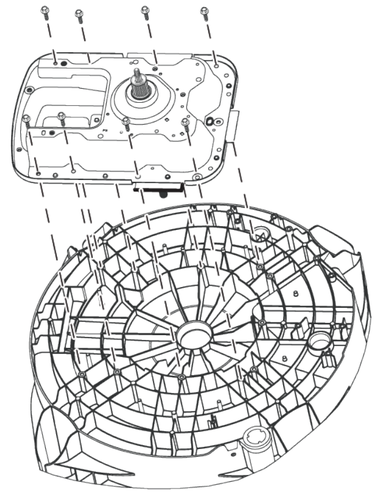
## ⑥ To Remove and Install Platform and Transmission Assembly:

1. Complete previous component removal ❹ and step 2 of previous component removal ❺.
2. Lean washer back and prop with prop blocks to stabilize or if there is room, lay the washer on its side.
3. Remove all components, brackets and harnesses from the platform assembly.



## ⑥ To Remove and Install Platform and Transmission Assembly (Continued):

4. Remove eight 3/8th hex bolts that secure the platform transmission assembly to the tub bottom.



5. Pry the platform assembly from the tub. The tub seal may offer some resistance. This is pressed onto the platform transmission assembly. Also the flat washer that the basket sits on should come out with the platform assembly. This flat washer can be reused. The hub nut and hub belleville washer will need to be replaced (**WH02X10363** and **WH01X21534**).
6. When reinstalling the platform transmission assembly be sure to slide the reusable flat washer on the shaft before inserting into the tub.
7. Line the mounting post on the tub with the opening on the platform assembly and push tub seal into the tub opening.
8. The platform bolts will pull the seal into the tub. So it is critical that a crisscross pattern is used when tightening the bolts. **NOTE:** Tighten the bolts approximately ¼" at a time so that the tub seal pulls in evenly.

## ⑦ To Remove the Hall Sensor:

1. Remove belt protector, belt and motor pulley.
2. Unclip the hall sensor from the motor and disconnect from the main harness.

### Consumer Help Indicators

**• Models with a display on the control panel**

Your washer is equipped with Consumer Help Indicator (CHI). CHI is our way to communicate a simple remedy for some situations that you can perform without the need to call for service. The chart below describes the helpful messages you may notice scrolling on your display when you return to start another load. These messages will provide simple remedies you can quickly perform.

To ensure that you see the message, the washer will scroll the message continually until you interact in some way with the controls.

| | |
|---|---|
| "**bALAnCING**" | After the wash cycle, the clothing wasn't evenly distributed enough to spin out the water. Redistribute the clothes more evenly in the washer and then run a ***Drain & Spin*** cycle. |
| "**Po**" (Water took too long to Pump Out) | Resume cycle or enter ***Drain & Spin***. If water pumps out, then the clog has likely cleared. If water remains in the washer, check for clogged or pinched drain hose. This situation could be more likely to appear, over time, if the external drain hose has been extended or restricted. |
| "**H2O SUPPLY**" (Water not entering washer) | Check your house water supply. Did you forget to turn on one or both supply valves after installation or coming back from vacation? As soon as the message starts to scroll, the washer will initiate a 3 minute lock-out period. The washer controls won't respond/change during this time. After the 3 minutes, you can begin your cycle again. If you try to bypass the lock-out period by unplugging the washer, the 3 minute timer will start over again. |
| "**CAnCELEd**" | If your machine has stopped itself before the cycle completed, CAnCELEd will scroll in the display. On models without a display, the two furthest right LED lights will flash. This indicates that an error has occurred. Try to run a ***Drain & Spin*** cycle to see if it will clear. If it does not clear, call 800.GE.CARES (800.432.2737) for service. |

**• Models without a display on the control panel**

Your washer is equipped with Consumer Help Indicator (CHI). CHI is our way to communicate a simple remedy for some situations that you can perform without the need to call for service. The chart below describes the helpful lights you may notice flashing when you return to the washer.

| | |
|---|---|
| **Spin LED** | After the wash cycle, the clothing wasn't evenly distributed enough to spin out the water. Redistribute the clothes more evenly in the washer and then run a ***Drain & Spin*** cycle. |
| **Rinse LED** (Water took too long to Pump Out) | Resume cycle or enter ***Drain & Spin***. If water pumps out, then the clog has likely cleared. If water remains in the washer, check for clogged or pinched drain hose. This situation could be more likely to appear, over time, if the external drain hose has been extended or restricted. |
| **Fill LED** (Water not entering washer) | Check your house water supply. Did you forget to turn on one or both supply valves after installation or coming back from vacation? As soon as the message starts to scroll, the washer will initiate a 3 minute lock-out period. The washer controls won't respond/change during this time. After the 3 minutes, you can begin your cycle again. If you try to bypass the lock-out period by unplugging the washer, the 3 minute timer will start over again. |
| **Two LED lights flashing** | If your machine has stopped itself before the cycle completed. The two furthest right LED lights will flash. This indicates that an error has occurred. Try to run a ***Drain & Spin*** cycle to see if it will clear. If it does not clear, call 800.GE.CARES (800.432.2737) for service. |

### Entry into Consumer Error Mode

- From an idle state only (all LEDs off), press and hold ***Start*** button for 10 seconds.
- After holding ***Start*** for 10 seconds, all LEDs will turn on, signifying the user may release the ***Start*** button.

### Behaviors While In Consumer Error Mode

- The **Pause** and **Lid Locked** LEDs should be constantly blinking while in CEM.
- The first fault, if present, will show on the display.
- Pressing ***Start*** will display the next fault code.
  - Models without 7-segment display: Fault code will blink in binary - the consumer will report which LEDs are blinking and which are not. See **Binary Display Fault Chart**
  - Models with 7-segment display: Fault code will blink on the 7-segment display.
- At the end of the fault list or if no faults present:
  - Models without 7-segment display: All status LEDs will blink.
  - Models with 7-segment display: 7-segment display will blink "—".

### Exiting Consumer Error Mode

- Pressing any button (other than ***Start***) or turning any knob will exit Consumer Error Mode.
- Consumer Error Mode will time out after 10 minutes

### Field Service Mode Entry

From an idle state only (all LEDs off), press and hold ***Start*** button while rotating the cycle selection knob 180 degrees (7 clicks) and then release the ***Start*** button.

- Once service mode is entered all LEDs will be flashing.
  - On 7-segment display models: (0) will be displayed for Test (0).
  - On models without a 7-segment display: All of the status LEDs above the cycle knob will be lit.
- The cycle selection Knob is now used to control the test selection menu.
  - Rotating the knob clockwise will increment the test numbers in the display.
  - Rotating the knob counter clockwise will decrement the test number in the display.
  - Models without 7-segment display: Will display tests using the status lights above the cycle knob in a binary format. (See Binary Chart)
  - Turning the knob to go to a different test will terminate any current active state.
- Once the test number is selected, pressing ***Start*** will begin the selected test.

### Exit Field Service Mode

- Field service mode will time out after 30 minutes if there is no user activity.
- Models without 7-segment display: Press and hold the ***Start*** button for 3 seconds
- Models with a 7-segment display: Press ***Power*** button

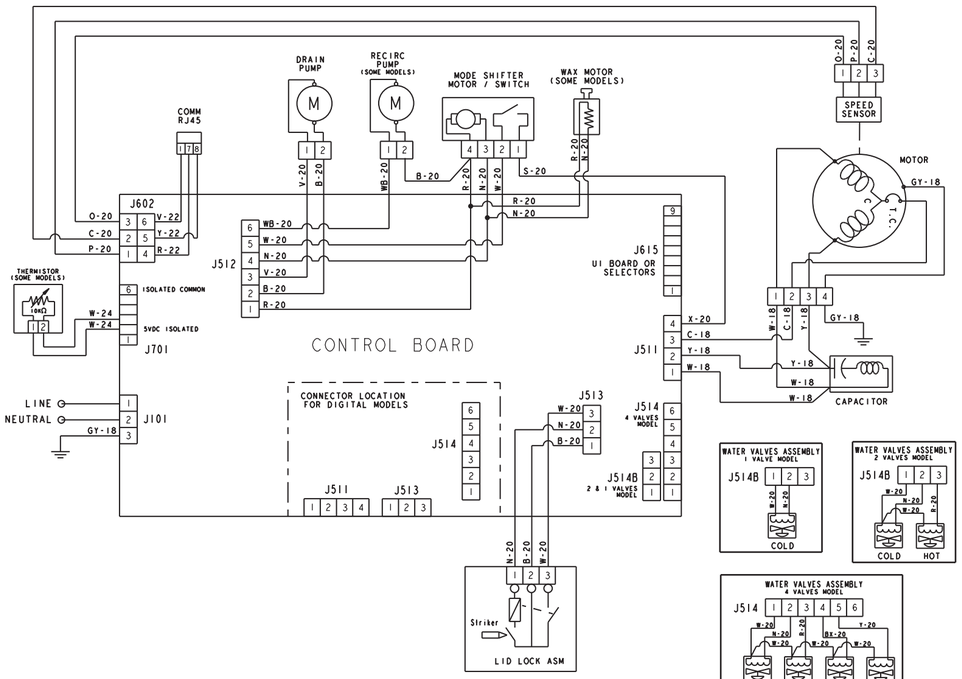
### Once the washer is in Service Mode, the following service features are available via the cycle knob (on some models):

| Knob Index / Test number (Displayed on SSD, 7-segment display, if present) (Without SSD will be displayed in binary format. (See Binary Chart) | Test Name | Description of test<br>If tests call for numbers to be shown it will: (Display on SSD, 7-segment display, if present.) (Without SSD will be displayed in binary format. (See Binary Chart) Turning the cycle knob will index to the next or prior test. |
|---|---|---|
| 0 | All LED's on | All LEDs on the display will be blink including "88" on the (7-segment display) SSD at a rate of 1Hz. |
| 1 | Fault Codes | Models without 7-segment display:<br>Faults will be shown;<br>- On ***Start*** button press, blink first fault code in binary. (See Binary Chart)<br>- On next ***Start*** button press, blink next fault code.<br>- At end of list OR if no fault codes are present, blink all LEDs.<br>- Pressing ***Start*** at the end of the fault list will wrap back around.<br>- Use the fault sequence.<br>7-segment display models:<br>On ***Start*** button press, blink first fault code Display fault code in SSD.<br>At end of list OR if no fault codes are present, washer will flash "- -". |
| 2 | Personality ID | Pressing ***Start*** will start the test.<br>Flash the set personality after pressing ***Start***.<br>Models without SSD use binary to show personality.<br>Model with SSD will display personality.<br>(See Personality ID Chart for the correct ID for the model being checked.) |
| 3 | UI Software Version (Critical) | |
| (Critical) | After entering this test, press the ***Start*** button to toggle through the software version number as follows: | After entering this test, press the ***Start*** button to toggle through the software version number as follows:<br>Example: v01.23<br>High end UI<br>1st press - "01" on 7SD<br>2nd press - "23" on 7SD<br>Low end UI (See Version Diagram below)<br>Major version (***Pause*** LED ON)<br>1st press - Display 0 in binary (all LEDs off)<br>2nd press - Display 1 in binary<br>Minor version (**Lid Locked** LED ON)<br>3rd press - Display 2 in binary<br>4th press - Display 3 in binary |
| 4 | UI Software Version (Non-critical) | After entering this test, press the ***Start*** button to toggle through the software version number as follows:<br>Example: v01.23<br>High end UI<br>1st press - "01" on SSD<br>2nd press - "23" on SSD<br><br>Low end UI (See Version Diagram below)<br>Major version (Pause LED ON)<br>1st press - Display 0 in binary (all LEDs off)<br>2nd press - Display 1 in binary<br>Minor version (**Lid Locked** LED ON)<br>3rd press - Display 2 in binary<br>4th press - Display 3 in binary |
| 5 | XML Version (Non-critical) | Example: v01.23<br>High end UI<br>1st press - "01" on SSD<br>2nd press - "23" on SSD<br><br>Low end UI (See Version Diagram below)<br>Major version (***Pause*** LED ON)<br>1st press - Display 0 in binary (all LEDs off)<br>2nd press - Display 1 in binary<br>Minor version (**Lid Locked** LED ON)<br>3rd press - Display 2 in binary<br>4th press - Display 3 in binary<br>NOTE: We only show the non-critical version number because the critical XML version number must match the application non-critical version number for the control to boot. If you get to service mode, then the XML critical version is correct. If not, update software. |
| 6 | Hot Water Valve | Pressing ***Start*** will toggle the hot water valve on and off. Test will have a timeout for how long valve will be on (1 minute). The valve will turn off when the test is exited. |
| 7 | Cold Water Valve | Pressing ***Start*** will toggle the cold water valve on and off. Test will have a timeout for how long valve will be on (1 minute). The valve will turn off when the test is exited. |
| 8 | Fabric Softener Dispenser | Pressing ***Start*** will toggle the fabric softener valve on and off.<br>Test will have a timeout for how long valve will be on (1 minute). The valve will turn off when the test is exited. |
| 9 | Spray Rinse Valve Check | Pressing ***Start*** will toggle the spray rinse valve on and off. Test will have a timeout for how long valve will be on (1 minute). The valve will turn off when the test is exited. |
| 10 | Pressure Sensor | Pressing ***Start*** will start the test.<br>Pressure sensor test will have a timeout.<br>All valves will turn on.<br>All LEDs will blink at start of test.<br>Stop blinking LEDs as approximate water levels are crossed.<br>The levels are:<br>2"<br>3"<br>4"<br>5"<br>6"<br>7" Water valves shuts off at this level. |
| 11 | Recirculate Pump | Pressing ***Start*** will toggle the recirculation pump on and off.<br>Test will have a (1 minute) timeout for how long recirculation pump will be on.<br>The recirculation pump will turn off when the test is exited. |
| 12 | Drain Pump | Pressing ***Start*** will toggle the drain pump on and off. Test will have a (4 minute) timeout for how long drain pump will be on. The drain pump will turn off when the test is exited. |
| 13 | Lid Switch | Pressing ***Start*** will start the test.<br>When the lid is open, the **Spin** status LED will blink. When the lid is closed, the **Rinse** status LED will blink. |
| 14 | Spin | Pressing ***Start*** will start the test.<br>Spin test will perform child safety algorithm before it starts to spin. (Two (2) sprays of water before locking the lid.) The lid must be closed to start the test. If lid is open the **Locked** LED will blink.<br>When started, the mode shift to spin will occur if required and the lid will be locked.<br>When mode shift is complete, the washer will begin spinning to max spin speed for the model being tested.<br>Spin test will have a (4 minute) timeout.<br>Be sure to only run this test with an empty basket as there is no OOB detection during this test.<br>The spin will stop when the test is exited.<br>The lid will unlock once the speed reaches 0 after the test is exited. |
| 15 | Agitate | Pressing ***Start*** will start the test. Agitate test will perform child safety algorithm before it starts to agitate. The lid must be closed to start the test. If lid is open, the **Locked** LED will blink.<br>When started, the mode shift to agitate will occur if required.<br>When mode shift is complete, the washer will begin agitating.<br>The test will pause if the lid is opened after starting. The test will resume on lid close if it was running when opened.<br>The test will stop when the test is exited. |
| 16 | Clear all Fault Codes | Pressing ***Start*** will clear all fault codes. |
| 17 | Change Personality | Pressing ***Start*** will start the test.<br>Press ***Start*** button again and the next valid personality should be displayed.<br>Press and hold the ***Start*** button to select the correct personality. |
| 18 | Analog Knob | Pressing ***Start*** will start the test.<br>Each options knob is represented by a specific corresponding status LED. (Far left options knob to the far left status LED)<br>When knob position changes, the LED for the specific knob blinks.<br>With each click to the right, the LED for the specific knob blinks faster.<br>With each click to the left, the LED for the specific knob blinks slower. |

PUB NUMBER **29-6439** **11-24**

| Binary Display Fault Chart | | |
|---|---|---|
| Fault/Test # displayed on 7-segment display | When entered into service mode | Fault/Test # displayed in binary format using cycle status lights |
| | Service Mode Tests | Filled circles indicate light on |
| 0 | All LEDs on | ● ● ● ● ● ● |
| 1 | Fault Codes | ○ ○ ○ ○ ○ ● |
| 2 | Personality ID | ○ ○ ○ ○ ● ○ |
| 3 | UI Software Version (Critical) | ○ ○ ○ ○ ● ● |
| 4 | UI Software Version (Non-critical) | ○ ○ ○ ● ○ ○ |
| 5 | XML Version (Non-critical) | ○ ○ ○ ● ○ ● |
| 6 | Hot Water Valve | ○ ○ ○ ● ● ○ |
| 7 | Cold Water Valve | ○ ○ ○ ● ● ● |
| 8 | Fabric Softener Dispenser | ○ ○ ● ○ ○ ○ |
| 9 | Spray Rinse Valve | ○ ○ ● ○ ○ ● |
| 10 | Pressure Sensor | ○ ○ ● ○ ● ○ |
| 11 | Recirculate Pump | ○ ○ ● ○ ● ● |
| 12 | Drain Pump | ○ ○ ● ● ○ ○ |
| 13 | Lid Switch | ○ ○ ● ● ○ ● |
| 14 | Spin | ○ ○ ● ● ● ○ |
| 15 | Agitate | ○ ○ ● ● ● ● |
| 16 | Clear all F Codes | ○ ● ○ ○ ○ ○ |
| 17 | Change Personality | ○ ● ○ ○ ○ ● |
| 18 | Analog Knob | ○ ● ○ ○ ● ○ |
| 19 | | ○ ● ○ ○ ● ● |
| 20 | | ○ ● ○ ● ○ ○ |
| 21 | | ○ ● ○ ● ○ ● |
| 22 | | ○ ● ○ ● ● ○ |
| 23 | | ○ ● ○ ● ● ● |
| 24 | | ○ ● ● ○ ○ ○ |
| 25 | | ○ ● ● ○ ○ ● |

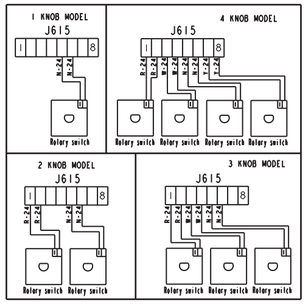
| | | | Binary Format |
|---|---|---|---|
| Model | Personality Number | Service Part Number | Filled Circles Indicate light on |
| MTW201 | 5 | WW01F02068 | ○ ○ ○ ● ○ ● |
| GTW223 | 4 | WW01F02068 | ○ ○ ○ ● ○ ○ |
| GTW302 | 6 | WW01F01907 | ○ ○ ○ ● ● ○ |
| GTW331 | 3 | WW01F02068 | ○ ○ ○ ○ ● ● |
| GTW334 | 3 | WW01F02068 | ○ ○ ○ ○ ● ● |
| GTW451 | 2 | WW01F02067 | ○ ○ ○ ● ○ ○ |
| GTW465 | 3 | WW01F01906 | ○ ○ ○ ○ ● ● |
| GTW490 | 0 | WW01F02067 | ○ ○ ○ ○ ○ ○ |
| GTW491 | 0 | WW01F02067 | ○ ○ ○ ○ ○ ○ |
| GTW495 | 1 | WW01F01906 | ○ ○ ○ ○ ○ ● |
| GTW550 | 7 | WW01F02067 | ○ ○ ○ ● ● ● |
| GTW580 | 6 | WW01F02072 | ○ ○ ○ ● ● ○ |
| GTW680 | 0 | WW01F02073 | N/A |
| GTW681 | 0 | WW01F02073 | N/A |
| GTW685 | 1 | WW01F02073 | N/A |
| GTW690 | 10 | WW01F02088 | N/A |







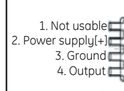



| Wire Color Key | |
|---|---|
| XX-YY | |
| XX:Wire color | |
| YY:Wire gauge | |
| W:White | C:Brown |
| B:Black | R:Red |
| S:Grey | P:Pink |
| N:Blue | V:Purple |
| Y:Yellow | O:Orange |
| G:Green | T:Tan |
| GY:Green with Yellow | |

| Thermistor Resistance Table | | |
|---|---|---|
| Temp(C) | Temp(F) | Resistance(Ω ) |
| 10 | 50 | 19901 |
| 15 | 59 | 15713 |
| 20 | 68 | 12493 |
| 28 | 82.4 | 8833 |
| 32 | 90 | 7446 |
| 38 | 100 | 5807 |
| 44 | 111 | 4558 |
| 50 | 122 | 3601 |
| 54 | 130 | 3108 |
| 66 | 150 | 2016 |
| 76 | 169 | 1435 |

## Pressure Sensor



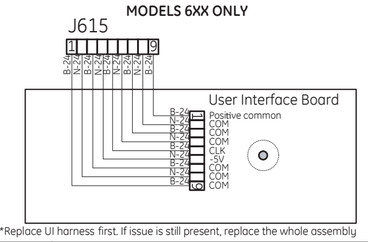

*To measure output voltage, connect the probes between pin 4 and pin 3. Shorting pin 3 to pin 2 will cause the main board to shut down

| Tub Water Level Pressure Sensor | | | |
|---|---|---|---|
| MODELS 200-491 ONLY | | MODELS 680 ONLY | |
| Inches of Water | Voltage | Inches of Water | Voltage |
| Empty | 0.4 | Empty | 0.4 |
| 1" | 0.7 | 1" | 0.8 |
| 2" | 1.0 | 2" | 1.0 |
| 3" | 1.4 | 3" | 1.2 |
| 4" | 1.6 | 4" | 1.4 |
| 5" | 1.8 | 5" | 1.6 |
| 6" | 2.0 | 6" | 1.8 |
| 7" | 2.2 | 7" | 2.0 |
| 8" | 2.4 | 8" | 2.2 |
| 9" | 2.6 | 9" | 2.4 |
| 10" | 2.8 | 10" | 2.6 |
| 11" | 3.0 | 11" | 2.8 |
| 12" | 3.2 | 12" | 3.0 |

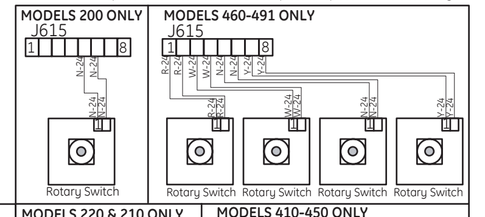
| Resistance Table | |
|---|---|
| Component | Resistance (Ω) |
| Drain pump | 13.2 |
| Lid Lock | 70 |
| Mode Shifter | 5700 |
| Motor (1/2HP) | 3.1 |
| Recirculation pump | 31.7 |
| Water Valves (Cold,Fab_Soft) | 1374 |
| Water Valves (Hot, Rinse) | 1515 |

*These values are read from the leads while disconnected from the control PCB
**The values are approximate
***Measure lid lock resistance between pins 2 and 3 and pins 1 and 3 while lid is closed

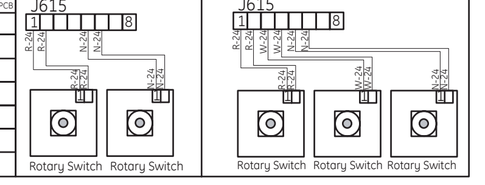
**MODELS 6XX ONLY**




*Replace UI harness first. If issue is still present, replace the whole assembly




| Rotary Switch Resistance Table | | |
|---|---|---|
| *Resistance values are read from the leads while disconnected from the control PCB | | |
| Position | Resistance (kΩ) | Voltage |
| 1 | 0.8 | 0.7 |
| 2 | 1.9 | 1.5 |
| 3 | 3.7 | 2.2 |
| 4 | 6.7 | 2.9 |
| 5 | 13.5 | 3.7 |
| 6 | 40.5 | 4.5 |




| Fault Code (Hex) | Name | Description | Repair / Action |
|---|---|---|---|
| 1 | Lock Monitor | Lid lock didn't occur or lid lock signal not seen by control due to lack of connection. | • Check the resistance of the lid lock assembly.<br>• Check the harness for open wires and or connectors from the board to the lock assembly.<br>• If lock assembly and harness prove good at the time of service, replace the lid lock assembly. |
| 2 | Lid Monitor | Control did not get lid closed signal from switch while motor was moving. Could mean the switch didn't close or control didn't get the signal because of lack of connection. | • Replace control if this fault happens repeatedly. |
| 3 | Locked Rotor Monitor | For 5 straight seconds control not seeing signal changes indicating the motor is turning while trying to spin.<br>Could mean the motor isn't rotating or Control didn't get the signal because of lack of connection. | • Physically check the washer for anything preventing motor movement.<br>• Check harness and harness connectors from the control to the motor.<br>• Verify hall sensor is connected to the main harness. Put washer in Service Mode and run TEST 13. Spin Test. If hall sensor is bad or disconnected, the basket will start to spin normally and then stop spinning after approximately 5 seconds. Ensure hall sensor is properly connected and positioned on the motor. If basket spins for approximately 15 seconds, the hall sensor is most likely NOT the cause.<br>• TCO should reset in approximately 45 minute. If TCO is tripped, make sure motor moves freely and that nothing is jamming it. Replace motor if it does not. |
| 4 | Reset Monitor | Control is resetting the software by itself due to criteria it believes could resolve itself upon reset. | • Check for loose connections at the control. Reconnect if any.<br>• Check for recommended house line voltage to the washer. |
| 5 | Mode Shifter | Control didn't see the transition from Agitate to Spin or vice-versa in the time required. Could mean the shift didn't occur or Control didn't get the signal because of lack of connection. | • Check mode shifter coupler for damage and the ability to slide in and out freely.<br>• Using an ohm meter, check to ensure mode shifter switch is in the open position.<br>• Check resistance of mode shifter motor (approximately 5.7K ohms).<br>• Check for 120VAC to the mode shifter motor at the control J512 connector.<br>• If voltage is present, replace the mode shifter.<br>• If voltage is not present at the control, replace control. |
| 6 | Critical Flood Level by Pressure. Pressure level exceeds 17.5 inches above pressure port. | Control received an extended period of pressure readings that is nearing over-flow levels. Pressure 17.5".<br>Voltage Output must be present. Could mean water did get that high due to briefly stuck water valve. Voltage output of sensor too high for actual water level because of sensor or water in pressure tube increasing pressure. | • Check pressure tube for pinches where it goes through top cover grommet.<br>• Check pressure tube for trapped water.<br>• Check for any leaking water valves.<br>• Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart. If it does not, the control will need to be replaced as the pressure sensor is mounted directly to the control. |
| 7 | Flood Warning Level by Pressure. Pressure level exceeds 16.5 inches above pressure port. | Main micro received and extended period of pressure readings that is greater than maximum allowable fill volume. Pressure 16.5". Voltage output must be present. Could mean water did get that high due to briefly stuck water valve. Voltage output of Sensor too high for actual water level because of sensor or water in pressure tube increasing pressure. | • This can happen if a large wet load is placed in the washer.<br>• Check pressure tube for pinches where it goes through top cover grommet.<br>• Check pressure tube for trapped water.<br>• Check for any leaking water valves.<br>• Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart. If it does not, the control will need to be replaced as the pressure sensor is mounted directly to the control. |
| 8 | Pressure Sensor Loss | This determines if there has been a too great of a difference in the pressure sensor reading and the expected pressure sensor reading for the amount of water the control calculated it has put in. It assumes there is a pressure leak, a clog in the pressure hose/system delaying the increase in pressure, or a significant amount water leaking out. | • Check house water supply vales are turned on.<br>• Check pressure tube for pinches where it goes through top cover grommet.<br>• Check pressure tube for trapped water.<br>• Check water valve operation<br>• Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart. If it does not, the control will need to be replaced as the pressure sensor is mounted directly to the control. |
| 9 | Lid Switch Redundancy | Start attempted for a 4th cycle when the previous 3 cycles have completed with backup micro seeing lid open. Could mean the switches didn't occur or backup processor didn't get the signal because of lack of connection. See Fault #2 as well. | • Open and close the lid to clear the error.<br>• Check harness and connectors that go to the lid switch.<br>• If the error will not clear, replace the lid switch. |
| 10 | Mode Shift Feedback Monitor | Signal feedback state from the mode shifter (agitate or spin) and the state requested by the control are not the same and the basket or agitator is rotating faster than 3-4 RPM. Agitate mode feedback signal is no voltage. | • Check mode shifter coupler for damage and the ability to slide in and out freely.<br>• Use ohm meter to ensure harness shows continuity to the mode shifter from the control.<br>• Check resistance of mode shifter motor (approximately 5.7K ohms).<br>• Check for 120VAC to the mode shifter motor at the control J512 connector.<br>• If voltage is present and no operation, replace the mode shifter.<br>• If voltage is not present at the control, replace control. |
| 11 | Clock Monitor | 1. AC power line frequency is not 60Hz.<br>2. Software failure. | 1. Check the frequency of the AC power outlet. If it is more than a few Hz off of 60Hz, notify utility company.<br>2. If house frequency is good, update software. |
| 12 | Redundant Flood Condition | Backup Processor received an extended period of pressure readings that is nearing over-flow levels.<br>Pressure 18.0"<br>Voltage Output must be present. Could mean water did get that high due to briefly stuck water valve. Voltage output of Sensor too high for actual water level because of Sensor or water in Pressure tube increasing pressure. | • Check pressure tube for trapped water.<br>• Check Each Valves Operation... (Replace Water Valve and send back to GE)<br>• Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart. If it does not, the control will need to be replaced as the pressure sensor is mounted directly to the control. Send Control back to GE.<br>• If the pressure tube is intact, replace control and Send Control back to GE. |
| 13 | Redundant Lid Unlocked | In spin mode, the lid switch feedback has voltage (lid closed), for more than 5 seconds the motor speed feedback assumes the basket is spinning > 4-5RPM when the lid lock feedback has no voltage (Lid Unlocked). Lid Switch Feedback has no Voltage when the BRPM is > 4-5RPM. | • Check lid switch continuity at J513 on the control.<br>• Check continuity of lid lock position. Opened or Closed.<br>• Check for proper operation of lid lock. 120VAC while activating<br>• Check lid lock wiring harness from the control to lock assembly.<br>• If lid lock assembly and harness are OK, replace control board |
| 14 | Lid Lock Failure | Signal received by control is indicating the lock will not lock or unlock when requested or the lid switch is indicating open when the signal received indicated locked. | • Verify that the lid lock is not blocked by any external debris.<br>• Check lid switch continuity at J513 on the control.<br>• Check continuity of lid lock position. Opened or Closed.<br>• Check for proper operation of lid lock. 120VAC while activating<br>• Check lid lock wiring harness from the control to lock assembly.<br>• If lid lock assembly and harness are OK, update the software. |
| 15 | Water Temp Sensor Invalid | 1. Thermistor disconnected/not present.<br>2. Failed thermistor | • Check thermistor resistance from connector J701 on the control board. Validate the resistance matches the table in mini-manual.<br>• Check wiring harness and connections.<br>• Replace thermistor. |

| Fault Code (Hex) | Name | Description | Repair / Action |
|---|---|---|---|
| 16 | Adaptive Drain/Slow Drain | The total number of times during machine life the actual amount of time the pressure sensor indicated the wash water had drained to empty exceeded the calculated time by the software. | • This fault is set when adaptive drain cycle occurs to try to remove the rest of water in tub.<br>• If the adaptive drain cycle times out, the control will run a Drain Pump Clearing algorithm to free the pump impeller of debris. Then it will finish draining. If drain clearing algorithm fails look for fault 18.<br>• If fault 16 is 100 and fault 18 never occurs there is no problem...If fault 16 and fault 18 equal each other in faults, then look for drain blockages including house standpipe. |
| 17 | Dry Load Sense Timeout | Dry load sense times out and moves to the next part of the cycle selected. This occurs when the washer is not reaching the target speed within a defined time limit for the load type selected. | 1. Check for water in the bottom of the tub. If so drain and try cycle again<br>2. Check the basket for excessive friction. Basket should spin freely. If not, find source of friction and remove it. |
| 18 | Drain Pump Clearing algorithm failed. | While draining the pressure sensor value for water level did not indicate the washer was empty before the Max Continuous Drain ON time was reached. | • This fault is set and will be seen with fault 16 when Drain Pump Clearing Algorithm failed to remove the blockage and the rest of water in tub.<br>• Check the drain pump for blockage.<br>• Check installation instructions for proper standpipe height.<br>• Check pressure tube for pinches where it goes through top cover grommet.<br>• Check pressure tube for trapped water.<br>• Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart. If it does not, the control will need to be replaced as the pressure sensor is mounted directly to the control.<br>• Check resistance of the pump (13.5 ohms) from J512 connector on the control.<br>• If open circuit, check wiring harness to the pump and pump motor.<br>• Check for 120VAC to the drain pump.<br>• If voltage is present and pump does not operate, replace pump.<br>• If voltage is not present, replace IMC (Interface Machine Control). |
| 19 | UI State Timeout | Washer was paused for over 12 hours | • This is normal operation. This will happen if the consumer and or control switched cycle to a paused state. |
| 20 | Critical Flood Level by Gallons | Water volume into the tub exceeded 41 gallons as calculated by the control.<br>1. Pressure tube is momentarily pinched, has water in it, partial blockage if Flood fault 12 occurs.<br>2. Low water pressure/flow or permanent pressure system blockage if NO Flood fault 12 occurs. | • Check pressure tube for pinches where it goes through top cover grommet.<br>• Check pressure tube for trapped water.<br>• Check for any leaking water valves.<br>• Check home water pressure.<br>• Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart. If it does not, the control will need to be replaced as the pressure sensor is mounted directly to the control. |
| 21 | Flood Warning Level by Gallons. | Water volume into the tub exceeded 36.3 gallons as calculated by the control. Stops filling<br>1. Pressure tube is momentarily pinched or has water in it, partial blockage if Flood fault 6, 7, or 12 occurs.<br>2. Low water pressure/flow or permanent pressure system blockage if NO Flood fault 6, 7, or 12 occurs. | • Check pressure tube for pinches where it goes through top cover grommet.<br>• Check pressure tube for trapped water.<br>• Check for any leaking water valves.<br>• Check home water pressure.<br>• Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart. If it does not, the control will need to be replaced as the pressure sensor is mounted directly to the control. |
| 22 | Out of Balance (OOB) during dry load sense. | Large wet/OOB load being washed. This is set if OOB condition is detected during dry load sense algorithm. Dry load sense will be abandoned and wet load sense will be started. | 1. Check for excessively OOB load. Customer Education on how to distribute load.<br>2. Check the basket for excessive friction or for being excessively out of round. Basket should spin freely and without wobble. If friction is found, remove it. I basket is bad replace it. |
| 23 | Critical Lid Lock | 1. Lock blockage<br>2. Lid Lock failure. Will not lock or unlock or is locked while lid is opened. | • Verify that the lid lock is not blocked by any external debris.<br>• Check lid switch continuity at J513 on the control.<br>• Check continuity of lid lock position. Opened or Closed.<br>• Check for proper operation of lid lock. 120VAC while activating<br>• Check lid lock wiring harness from the control to lock assembly.<br>• If lid lock assembly and harness are OK, replace control board |
| 24 | Lid Logic Failure | Lid switch failure.<br>This fault is set if the system perceives the lid to be both OPEN and LOCKED for 5 consecutive seconds | 1. Check harness and connections from the control to the lid lock assembly for damage and continuity.<br>2. Run a spin cycle. Pull up on the lid during spin for more than 5 seconds and see if this fault occurs. Replace lid lock assemble.<br>3. If above does not correct the fault, replace the control. |
| 25 | Pressure Sensor Dropout | 1. Disconnected pressure hose.<br>2. Pressure tube is pinched or has water in it.<br>3. Pressure sensor failure. | • Check pressure tube for pinches where it goes through top cover grommet.<br>• Check pressure tube for trapped water.<br>• Check for any leaking water valves.<br>• Check home water pressure.<br>• Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart. If it does not, the control will need to be replaced as the pressure sensor is mounted directly to the control. |

29-6439 Rev.2

29-6439 Rev.2

29-6439 Rev.1

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